|   |       |           |  |                 |          |             |          |          |          |          |                               |            |       |          |                 |          |                         |     |              |         |               |          |           | Reexamination |                 |          |              |                 |          |          |          |     |   |   |
|---|-------|-----------|--|-----------------|----------|-------------|----------|----------|----------|----------|-------------------------------|------------|-------|----------|-----------------|----------|-------------------------|-----|--------------|---------|---------------|----------|-----------|---------------|-----------------|----------|--------------|-----------------|----------|----------|----------|-----|---|---|
|   |       |           |  |                 |          |             |          |          |          |          |                               |            |       |          | 10/706,420      |          |                         |     |              |         |               |          |           | MURRAY ET AL. |                 |          |              |                 |          |          |          |     |   |   |
|   |       |           |  |                 |          |             |          | Ш        |          |          |                               |            |       |          |                 |          | Examiner Helen F. Pratt |     |              |         |               |          |           |               |                 | Art Unit |              |                 |          |          |          |     |   |   |
|   |       |           |  |                 |          |             |          |          |          |          |                               |            |       |          |                 |          |                         |     |              |         |               |          |           |               |                 |          |              |                 |          |          |          |     |   |   |
|   |       |           |  |                 |          |             |          |          |          |          |                               |            |       |          | Heleli F. Flatt |          |                         |     |              |         |               |          |           | ] 1/01        |                 |          |              |                 |          |          |          |     |   |   |
|   |       |           | Π  |                 |          |             |          | ]        |          |          |                               | /T         | hrou  | ah n     | um              | ors      | (al)                    |     |              |         |               |          |           | 7             | П               |          |              |                 |          |          |          |     |   |   |
|   |       |           | 1  | Rejected        |          |             |          |          | -        |          | (Through numeration Cancelled |            |       |          |                 | u.,      |                         | 1   | 1            | Non-    | Elec          | cted     |           | A             | Appeal          |          |              |                 |          |          |          |     |   |   |
|   |       |           |  |                 |          |             |          |          |          |          |                               |            |       |          |                 |          |                         |     | -            | ╁       |               |          |           | 1             | $\vdash$        |          |              |                 |          |          |          |     |   |   |
|   | =     |           |  |                 |          |             | Allowed  |          |          |          |                               | Restricted |       |          | i               |          |                         | 1   | H            | Inter   | fere          | nce      | ŀ         | 0             | C               | Obje     | ecte         | ∍d              |          |          |          |     |   |   |
|   |       |           | کے   | $\overline{}$   |          |             |          | J        |          |          |                               |            |       |          |                 |          |                         |     |              |         | J             | ш        |           |               |                 |          |              |                 |          |          |          |     |   |   |
|   | Cla   | aim       | $\Box$   | )               | Date     |             |          |          |          |          |                               |            | Claim |          |                 |          |                         | Da  | te           |         |               |          | Claim     | aim           |                 | Date     |              |                 |          |          | ] .      |     |   |   |
|   | -     | <u>la</u> | 1  |                 |          |             |          |          |          |          |                               |            | _     | lal      |                 |          | - 1                     |     |              |         |               |          | _         | <u> </u>      |                 |          |              |                 |          |          |          | ļ   |   |   |
|   | Final | Original  | 11   |                 |          |             |          |          |          |          |                               |            | Final | Original |                 |          |                         |     |              |         |               |          | Final     | Original      |                 |          |              |                 |          |          |          |     |   |   |
|   |       | 0         | 5  |                 |          |             |          |          |          |          |                               |            | _     |          |                 |          |                         |     |              |         |               |          | -         | Ō             | П               |          |              |                 |          |          | 1        |     |   |   |
|   |       | 1         | L  |                 |          |             |          | _        |          |          |                               |            |       | 51       |                 | $\Box$   | $\bot$                  |     | Ţ            | T       | П             |          |           | 101           |                 |          | 1            |                 |          |          |          |     |   |   |
|   |       | 3         | ╁  | Н               |          | -           | _        | -        |          |          | $\vdash$                      |            |       | 52<br>53 | -               | $\dashv$ | +                       |     | +            | +       | $\dashv$      | $\dashv$ | -         | 102           | $\vdash$        | -        | +            | ├               |          | $\dashv$ | +        | -   |   |   |
|   |       | 4         | t  | Н               | _        |             |          |          | -        | -        | $\vdash$                      |            |       | 54       |                 | -        | +                       | +   | +-           | ╁       | $\dashv$      | $\dashv$ | -         | 103           | $\vdash$        |          | +            | $\vdash$        |          | $\dashv$ | ╅        | -   |   |   |
|   |       | 5         |  |                 | 1        | <b>/</b>    | /        | 5        | 1        | っ        |                               | . 1        |       | 55       |                 | 寸        | $\dashv$                | 1   | Ť            | 1       | 11            |          |           | 105           | Н               |          | $\dagger$    | $\vdash$        | $\vdash$ | $\neg$   | _        | 1   |   |   |
|   |       | 6         |  | $\Box$          | <b>X</b> | 2           |          |          | 7        |          |                               |            |       | 56       |                 |          |                         |     |              | 1       |               |          |           | 106           |                 |          |              |                 |          |          |          | ]   |   |   |
|   |       | 7         | _  | Ĭ               |          |             |          |          | _        |          | ,_                            | ا. ا       |       | 57       |                 | _        | 4                       | _ _ | 퇶            | 1       | $\perp \perp$ | _        |           | 107           | Ш               |          |              |                 |          |          |          | _   |   |   |
|   |       | 8<br>9    | ├-   | $\vdash$        |          |             |          |          | وا       | 4        | to                            | 4          |       | 58       |                 |          | $\dashv$                | - - | +            | +       |               | _        |           | 108           | $\vdash$        |          | 4            | _               |          |          | _        | 4   |   |   |
|   |       | 10        | -  | Н               |          | $\subseteq$ | -        |          | Ĺ        | -        | $\vdash$                      |            |       | 59<br>60 | $\dashv$        | $\dashv$ | -+-                     | +   | +            | +       | +             | -        | -         | 109<br>110    | $\vdash$        | +        | ╁            | ⊢               |          |          | -        | -   |   |   |
|   |       | 11        | ╁  | Н               |          |             | -        | ļΨ       | 1        | -        | $\vdash$                      |            | -     | 61       | $\dashv$        | $\dashv$ | +                       | +   | ╁            | ╁       | +             | -        |           | 111           | $\vdash$        |          | ╁            | $\vdash$        |          | -        | $\dashv$ | ┨   |   |   |
|   |       | 12        | T  | П               |          |             |          |          | Г        |          |                               |            |       | 62       |                 | _        | $\top$                  | _   | ✝            | †       | 11            | _        |           | 112           |                 | _        | +-           | -               |          | _        |          | ┪   |   |   |
|   |       | 13        |  |                 |          |             |          |          |          |          |                               |            |       | 63       |                 |          |                         |     |              | 1       |               |          |           | 113           |                 |          |              |                 |          |          |          | _   |   |   |
|   |       | 14        | <u> </u>   | Ш               | Ш        |             |          | _        | _        |          |                               |            |       | 64       | $\perp$         | _        | 4                       |     | $\perp$      | $\perp$ |               |          |           | 114           |                 |          |              |                 |          |          |          | ]   |   |   |
|   |       | 15<br>16  | $\vdash$   | $\vdash$        | -        | _           |          | -        | _        |          | Н                             |            |       | 65<br>66 | -               |          | $\dashv$                | +   | +-           | 4       | +             | 4        |           | 115           | $\vdash$        |          | ┿            | <del> </del>    |          | 4        | _ _      | 4   |   |   |
|   |       | 17        | +  | $\vdash$        |          |             |          |          | -        | -        |                               |            |       | 67       | $\dashv$        | +        | $\dashv$                | +   | +            | +       | ++            | -        |           | 116<br>117    | H               |          | +            | $\vdash$        |          |          | -        | ┨   |   |   |
|   |       | 18        | ı  |                 | Н        |             |          |          | $\vdash$ |          |                               |            |       | 68       | 寸               |          | $\dashv$                | ╁   | +            | $^{+}$  | +             | -        |           | 118           | $\vdash$        | _        | +            |                 | Н        |          |          | ┨   |   |   |
|   |       | 19        |  |                 |          |             |          |          |          |          |                               |            |       | 69       |                 |          |                         |     | T            | Ť       |               |          | -         | 119           |                 | _        | 1            |                 |          | $\top$   | _        | ┪   |   |   |
|   |       | 20        | L  |                 |          |             |          |          |          |          |                               |            |       | 70       | $\Box$          |          | $\Box$                  |     | I            | I       |               |          |           | 120           |                 |          |              |                 |          |          |          | ] . | ٠ |   |
|   |       | 21<br>22  | <u> </u>   | -               | Ш        | Щ           |          | _        | <u> </u> |          |                               |            |       | 71       | _               |          | -                       | 4   | ╀            | 4       |               | 4        | ļ         | 121           | $  \cdot  $     |          | ↓_           | _               | Щ        | 4        |          | 4   |   |   |
|   |       | 23        | ⊢  | $\vdash$        | Н        |             |          | H        | -        | -        | Н                             |            |       | 72<br>73 | -               | -        | $\dashv$                |     | ╁            | +       | +             | -        | -         | 122<br>123    | $\vdash$        |          | +            | -               | -        | $\dashv$ | -        | -   |   |   |
|   |       | 24        | <del>                                     </del> | Н               |          | $\neg$      |          |          | -        |          | Н                             |            |       | 74       | $\dashv$        | +        | $\dashv$                | +   | ╁            | +       | +             | $\dashv$ | -         | 123           | $\vdash$        |          | +            |                 | H        | +        | +-       | ┨   |   |   |
|   |       | 25        |  |                 |          |             |          |          |          |          |                               | li         |       | 75       |                 |          | _                       |     | $^{\dagger}$ | $\top$  | $\dashv$      |          |           | 125           | H               |          | <del> </del> | $\vdash$        | Н        | $\dashv$ | $\dashv$ | 1   |   |   |
|   |       | 26        |  |                 |          |             |          |          |          |          |                               |            |       | 76       |                 |          |                         |     |              |         |               |          |           | 126           |                 |          |              |                 | П        |          |          | 7   |   |   |
|   |       | 27        | ┞  |                 | _        |             |          |          | <u> </u> |          |                               |            |       | 77       | $\dashv$        |          |                         |     |              |         |               |          |           | 127           |                 |          |              |                 |          |          |          | ]   |   |   |
|   |       | 28<br>29  | ╀  | $\vdash$        |          | $\vdash$    | _        |          | ├        |          |                               |            |       | 78<br>79 | $\dashv$        | $\dashv$ | -                       |     | +            | +       | -  -          | _        | <u> </u>  | 128           |                 |          | ↓            | <u> </u>        | Ш        | _        |          | 4   |   |   |
|   |       | 30        | 十  |                 |          | $\vdash$    | -        |          | ├        |          | -                             |            |       | 80       | $\dashv$        | $\dashv$ | -                       | _   | +            | +       |               | ┥ .      | ·         | 129<br>130    | $\vdash$        |          | +            | $\vdash$        | $\vdash$ | +        |          | -   |   |   |
|   |       | 31        |  |                 |          |             |          |          | $\vdash$ |          |                               |            |       | 81       | $\dashv$        | $\dashv$ | -+                      | +   | +            | +       |               | ╡        | <b>-</b>  | 131           |                 | +        | +            | $\vdash$        |          | $\dashv$ | +        | ┥   |   |   |
|   |       | 32        |  |                 |          |             |          |          |          |          |                               |            | •     | 82       |                 |          | $\top$                  |     | T            | +       |               | $\dashv$ |           | 132           | $\Box$          |          | T            |                 | Н        | $\dashv$ |          | 1   |   |   |
|   |       | 33        |  |                 |          |             |          |          |          |          |                               |            | _     | 83       |                 | $\Box$   |                         |     | Ι            |         |               |          |           | 133           |                 |          |              |                 |          |          |          | ]   |   |   |
|   |       | 34<br>35  | ├-   | $\vdash$        | -        | _           | _        |          |          |          | $\square$                     |            |       | 84       | _               | 4        | _                       |     | ╀            | 4       | $\bot$        | _        | <u> </u>  | 134           | $\perp$         |          |              |                 |          |          |          | 1   |   |   |
|   |       | 36        | $\vdash$   | $\vdash$        |          | $\dashv$    |          | $\vdash$ | _        |          |                               |            |       | 85<br>86 | $\dashv$        | $\dashv$ | +                       | -   | +            | +       | +             |          |           | 135<br>136    | $\vdash$        |          | +-           |                 | -        | -        |          | 4   |   |   |
|   |       | 37        |  | $\vdash$        |          |             |          |          | $\vdash$ | $\vdash$ | $\vdash$                      |            |       | 87       | -               | $\dashv$ | -                       | +   | ╁            | +       | ++            | -        |           | 137           | $\vdash$        | - -      | ┿            | $\vdash$        | $\vdash$ | -        | +        | ┥   |   |   |
|   |       | 38        |  |                 |          |             |          |          |          | П        | $\Box$                        |            |       | 88       | $\exists$       | $\dashv$ | +                       | +   | +            | +       | $\top \top$   | 1        |           | 138           |                 | +        | +            |                 |          | $\dashv$ | +        | 1   |   |   |
|   |       | 39        |  |                 |          |             |          |          |          |          |                               |            |       | 89       |                 |          |                         |     |              | Ι       |               |          |           | 139           |                 |          |              |                 |          | 寸        |          | 1   |   | 7 |
|   |       | 40        |  |                 |          |             | _        |          |          |          |                               |            |       | 90       |                 | _        | $\perp$                 |     | L            | $\perp$ |               |          |           | 140           |                 |          | L            |                 |          | $\Box$   |          |     |   |   |
|   |       | 41<br>42  | $\vdash$   | $\vdash \vdash$ | _        |             |          |          |          | $\vdash$ | _                             |            |       | 91<br>92 | -               | $\dashv$ | +                       |     | +            | +       | +             | - .      | <u> </u>  | 141           | $\vdash \vdash$ | $\perp$  | ┼            | Ш               |          | $\perp$  | 4        | 4   |   |   |
| l |       | 43        | $\vdash$   | $\vdash$        | $\dashv$ |             | -        | -        | -        | Н        | $\vdash$                      |            |       | 93       | $\dashv$        | +        | +                       | +-  | +-           | +       | ++            | $\dashv$ | -         | 142<br>143    |                 | +        | +            | Н               | $\vdash$ | -+       | +        | -   |   |   |
|   |       | 44        |  |                 | $\neg$   |             |          |          |          | Н        |                               |            |       | 94       | $\dashv$        | 十        | $\dashv$                | +   | $\dagger$    | +       | ++            | $\dashv$ | -         | 144           | $\vdash$        | +        | <del> </del> | $\vdash$        | $\vdash$ | $\dashv$ | $\dashv$ | 1   |   |   |
|   |       | 45        |  |                 |          |             |          |          |          |          |                               |            |       | 95       |                 |          | $\perp$                 |     | L            |         |               |          |           | 145           |                 |          |              |                 |          | _†       |          | 1   |   | • |
| [ |       | 46        | $\sqcup$   | $\sqcup$        | _        | _           | 4        |          |          | Ш        | $\Box$                        |            |       | 96       | $\bot$          | $\bot$   | $\perp$                 | 1   |              | Ţ       | $\bot$        |          |           | 146           | П               |          |              |                 |          | $\Box$   | $\Box$   | ]   |   |   |
| - |       | 47<br>48  | $\vdash$   | $\vdash$        | $\dashv$ | _           | $\dashv$ | $\vdash$ | Н        | $\vdash$ | $\dashv$                      | ŀ          |       | 97<br>98 | 4               | $\dashv$ | +                       | +   | +-           | +       | ++            | $\dashv$ | <u> </u>  | 147           | $\vdash \vdash$ | _        | -            | $\vdash \vdash$ |          | 4        | 4        | 4   |   |   |
| ŀ |       | 49        | $\vdash$   | $\vdash$        | $\dashv$ |             | $\dashv$ |          | Н        | $\vdash$ | $\dashv$                      | -          |       | 99       | $\dashv$        | +        | $\dashv$                | +   | ╁            | +-      | +             | $\dashv$ | <b>-</b>  | 148<br>149    | $\vdash \vdash$ | - -      | +-           | $\vdash$        |          | +        | +        | 4   |   |   |
| 1 |       | 50        | $\Box$   | $\vdash$        | $\dashv$ |             | $\dashv$ |          |          | $\vdash$ | ᅱ                             | ŀ          |       | 100      | $\dashv$        | $\dashv$ | +                       | +   | T            | +       | +-            | $\dashv$ | <b>——</b> | 150           | $\vdash$        | +        | +            | $\vdash$        | $\dashv$ | +        | +        | ┪   |   |   |
| • |       |           |  |                 |          |             |          |          |          |          |                               | L          |       | - 1      |                 |          |                         |     |              | -       |               |          |           |               |                 |          |              | ш               |          |          |          |     |   |   |

Application/Control No.

Applicant(s)/Patent under